

**REMARKS**

**Status of the Claims:**

Claims 18 and 72-74 are currently amended and find support throughout the as-filed application. No new matter has been added.

Upon entry of these amendments, claims 1-4, 7-22, 25-35, 67-70, and 72-74 will be pending and are presented for reconsideration.

**Response to Restriction Requirement**

In alleging “the promoter sequences are only related as combination/subcombination in respect to a flax plant,” the PTO maintains the Restriction Requirement on the grounds that “the isolated nucleic acid of Group II is not a subcombination of a plant other than flax and thus is interpreted as an isolated product and Group I is related to Group II as a process of using the product.” Office Action, item 4, page 2.

For the reasons for record, Applicants maintain that it is improper to divide a generic claim, and thus do not agree with the PTO’s stated position. Moreover, Applicants respectfully request that the Restriction be held in abeyance until an indication of allowable subject matter.

**Claim Objections:**

Claims 18 and 72-74 are objected because they allegedly recite non-elected subject matter. Office Action, item 5, pages 2-3. For the reasons of record, Applicants maintain that it is improper to divide a generic claim and respectfully request that the Restriction be held in abeyance until an indication of allowable subject matter. The present claims recite SEQ ID NO: 6 solely for advancing prosecution of the provisionally elected subject matter.

**Rejections under 35 U.S.C. § 112, second paragraph:**

**A. Claims 18 and 70**

Claims 18 and 70 remain rejected under 35 U.S.C. §112, second paragraph, for alleged indefiniteness. Office Action, item 6, pages 3-4. Specifically, claim 18 is rejected

because allegedly "it recites a nucleic acid sequence that is complementary...yet it is unclear how a complementary sequence of a promoter would function in the method of claim 1." *Id.* Applicants respectfully traverse the rejection because the specification makes clear that a complement can be a seed specific-promoter. *See*, for example, paragraph number [0102]. Accordingly, the rejection is improper and should be withdrawn.

Dependent claim 70 is rejected because it is allegedly unclear "if the claimed plant seed comprises the chimeric nucleic acid sequence used in the method of claim 1." Office Action, page 4. Specifically, the PTO alleges "T0 transgenic plants would produce progeny without the 'nucleic acid of interest.'" *Id.* While Applicants do not agree with the PTO's stated position, the present version of claim 70 makes clear that that recited seed expresses the chimeric nucleic acid construct and therefore the rejection should be withdrawn.

#### **B. Claims 18 and 72-74**

Claims 18 and 72-74 are allegedly indefinite because "SEQ ID NO: 6 does not comprise the ABRE sequence." Office Action, page 4. Applicants respectfully traverse this rejection because an ABRE element may be found in SEQ ID NO: 6 between nucleotides 253 and 257. Accordingly, the rejection is improper and should be withdrawn.

#### **Rejections under 35 U.S.C. § 112, first paragraph:**

##### **A. Written Description**

Claims 1-4, 7-22, 25-35, 65-70, and 72-74 are rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. Office Action, item 7, pages 4-7.

Specifically, the PTO alleges "it does not appear from Applicants' teachings or that of the prior art that the promoter of nucleotides 1-417 of SEQ ID NO: 6 comprises an RY repeat." Office Action, item 7, pages 4-5. Applicants respectfully traverse the grounds for this rejection because SEQ ID NO: 6 does indeed comprise an RY Repeat. As disclosed in paragraph number [060], "the RY promoter element is defined as a promoter element having a sequence of CATGCA in accordance with the consensus sequence for RY promoter

elements as discussed by Dickenson *et al.* (1988) *Nuc. Acids Res.* 16:371.” Accordingly, an RY element having the sequence CATGCA can be found in SEQ ID NO: 6 at base pairs 285-290.

Additionally, the PTO alleges “While the sequence described in SEQ ID NO: 6 (Figure 3) comprises a G box element, it does not appear to comprise an ABRE promoter element within the understanding of the art.” Office Action, page 6. As discussed above, an ABRE element may be found in SEQ ID NO: 6 between nucleotides 253 and 257.

Finally, in regards to the claimed hybridization language in claim 18, the PTO alleges “Applicants provide no evidence that what Applicants assert are species of a claimed genus would hybridize one to the other under the recited conditions.” Office Action, page 7. Applicants respectfully traverse the grounds for this rejection.

With respect to SEQ ID NO: 6, the as-filed specification enables sequences that are complementary, sequences that have substantial sequence homology, and sequences that are analogs of SEQ ID NO: 6. With respect to sequences that hybridize under stringent conditions to recited sequences, the as-filed application provides sufficient guidance to enable one of skill in the art to prepare such sequences. That is, only a routine amount of work would be required for someone skilled in the art to design suitable sequences and assess their hybridization under the recited stringent hybridization conditions.

For at least these reasons, the Section 112 rejections are improper and should be withdrawn.

## **B. Enablement**

Claims 1-4, 7-22, 25-35, and 67-70 remain rejected under 35 U.S.C. §112, first paragraph, for alleged lack of enablement. Office Action, item 8, pages 7-10

The PTO takes the position that the specification, while enabling for a method of using an isolated nucleic acid molecule comprising a nucleic acid sequence comprising bases 1-417 of SEQ ID NO: 6 having seed-preferred promoter activity and a transgenic plant

transformed therewith, does not reasonably enable a genus of seed-specific promoters obtained from flax comprising an RY repeat and an ABRE promoter element, or an isolated nucleic acid molecule that hybridizes under stringent conditions to SEQ ID NO: 6. Office Action, item 8, pages 7-10.

Applicants respectfully traverse the grounds for this rejection because the application discloses at least four examples of seed-specific promoters, each of which comprise an RY repeat and an ABRE promoter element. The nucleic acid sequences of the four promoters are provided in the application in SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 6, and SEQ ID NO: 8. Therefore, the as-filed specification describes a representative number of nucleotide sequences (*e.g.* SEQ ID NOs: 1, 4, 6, and 8) as well as the structural features common to the members of the genus (*e.g.* an RY repeat and ABRE promoter element) for the seed-specific promoters defined in the claims. Accordingly, Applicants have properly described the genus of seed-specific promoters recited in the claims. Therefore, Applicants have taught how to make and use the genus of seed-specific promoters recited in the instant claims.

With respect to SEQ ID NO: 6, the as-filed specification enables sequences that are complementary, sequences that have substantial sequence homology, and sequences that are analogs of SEQ ID NO: 6. With respect to sequences that hybridize under stringent conditions to recited sequences, the as-filed application provides sufficient guidance to enable one of skill in the art to prepare such sequences. That is, only a routine amount of work would be required for someone skilled in the art to design suitable sequences and assess their hybridization under the recited stringent hybridization conditions.

**Double Patenting:**

Claims 18 and 72-74 remain rejected on the ground of nonstatutory obviousness-type double patenting over claim 1 of U.S. Patent No. 6,777,591. Office Action, item 9, page 10. Applicants respectfully defer this issue until the application is otherwise in condition for allowance.

**CONCLUSION**

In view of the foregoing, we respectfully submit that the application is in order for allowance and early indication to that effect is respectfully requested. Should the Examiner deem it beneficial to discuss the application in greater detail, he is kindly requested to contact the undersigned at his convenience.

Respectfully submitted,

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